

Application Serial No. 09/721,141

—Figs. 7a-e are diagrams illustrating an example of the process performed in Steps 256-257. Fig. 7a, is a dependency tree diagram for four tasks (Task 1 - Task 4). In this example, Task 2 is dependent upon Task 1, and Tasks 3 and 4 are dependent upon Task 2. Fig. 7b is a table providing pertinent information concerning the Group 3 assignments. Fig. 7c is a table providing pertinent information concerning the Group 4 assignments. In Fig. 7c, each of the assignments associated with Task 1 have been scheduled with the exception of Assignment 2. If Assignment 2 is the Current Assignment, upon scheduling Assignment 2, all of the assignments for Task 1 will be scheduled. At this point, the Group 4 assignments are examined to determine which assignments were dependent upon Task 1. Because Task 2 is directly dependent upon Task 1, each of the predecessor counts for the Task 2 assignments (Assignments 4-7) are decremented by one. Furthermore, because Task 3 and Task 4 are indirectly dependent upon Task 1 (i.e. they are dependent on Task 2 which is dependent on Task 1) then each of the predecessor counts for Task 3 and Task 4 assignments are decremented by 1. Finally, if the predecessor counts of any Group 4 assignments have been decremented to zero, then they are moved into Group 3. In this example, the Task 2 assignments (Assignments 4-7) will be moved into Group 3. Figs. 7d-e illustrate the results after Assignment 2 has been scheduled. Fig 7d illustrates that Assignments 4- 7 have been moved into Group 3. Fig 7e illustrates that the predecessor counts for Assignments 8-10 have been decremented by 1 but they remain in Group 4.—

In the Claims

Please amend the claims as follows:

Substitute Claim 26 with the following replacement claim:

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26. (Once Amended) A method for generating a plurality of individually schedulable assignments for a task, based upon task constraints associated with said task, said task constraints identifying N resources assigned to said task where N is a positive integer, and a required work-amount corresponding to each of said N resources, comprising the steps of:

dividing said task into N assignments, said task comprising an amount of work, each assignment comprising a portion of the work that corresponds with an individual resource;

associating each of said N assignments with one of said N resources, each resource comprising one of an inanimate and animate object capable of performing an assignment;

for each assignment, identifying the task, corresponding individual resource, and one of the portion of work corresponding to a respective resource and a duration of the assignment; and

generating a list comprising the N assignments.

Substitute Claim 29 with the following replacement claim:

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29. (Twice Amended) A computer-readable medium on which is stored a computer program for generating a plurality of schedulable assignments for a task, said program performing the steps comprising:

receiving a task description for said task, said task description identifying N resources assigned to said task where N is a positive integer, said task comprising an amount of work, a required work-amount corresponding to each of said N resources, and one or more scheduling constraints for said task:

dividing said task into N assignments, each of said N assignments identifying one of said N resources, each assignment comprising a portion of the work that corresponds with an individual resource, each resource comprising one of an inanimate and animate object capable of performing an assignment;

for each assignment, identifying the task, corresponding individual resource, and one of the portion of work corresponding to a respective resource and a duration of the assignment;

associating each of said N assignments with said scheduling constraints for said task; and

generating a list comprising the N assignments.